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(54) **METHOD AND SYSTEM FOR ENHANCING AUDIO SIGNALS**

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(58) Field of Search **381/1, 61, 63, 381/98, 99, 17, 18; 84/625, 660**

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(57) **ABSTRACT**

A technique for enhancing audio signals generated from compressed digital audio files is described. The technique uses a Bass Maximizer module, a Harmonic Exciter module and a Quasi Stereo module. The Bass Exciter module enhances the intensity, depth and punch of the bass audio content by creating harmonic sequences from low frequency components contained in the original input signal. The Harmonic Exciter module adds to the treble audio content of the original input signal by generating harmonic series from the high frequency components contained in the input signal. The Quasi Stereo Module creates a stereo image of the enhanced input signal by adding and subtracting delayed and filtered versions of the enhanced input signal with itself to create left and right channeled stereo-like outputs. The technique provides a useful tool to regenerate from an audio signal more pleasant and joyful sounds.

26 Claims, 5 Drawing Sheets

